#1

OIPE

RAW SEQUENCE LISTING DATE: 08/28/2001 PATENT APPLICATION: US/09/758,493 TIME: 10:02:12

Input Set : A:\00786-804001.TXT

Output Set: N:\CRF3\08282001\1758493.raw

ENTERED

```
4 <110> APPLICANT: Arnaout, M. Amin
         Li, Rui
 6
         Xiong, Jian-Ping
 8 <120> TITLE OF INVENTION: HIGH AFFINITY INTEGRIN POLYPEPTIDES AND
         USES THEREOF
11 <130> FILE REFERENCE: 00786-804001
13 <140> CURRENT APPLICATION NUMBER: US 09/758,493
14 <141> CURRENT FILING DATE: 2001-01-11
16 <150> PRIOR APPLICATION NUMBER: US 60/221,950
17 <151> PRIOR FILING DATE: 2000-07-31
19 <160> NUMBER OF SEQ ID NOS: 20
21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 191
25 <212> TYPE: PRT
26 <213> ORGANISM: Homo sapiens
28 <400> SEQUENCE: 1
29 Cys Pro Gln Glu Asp Ser Asp Ile Ala Phe Leu Ile Asp Gly Ser Gly
31 Ser Ile Ile Pro His Asp Phe Arg Arg Met Lys Glu Phe Val Ser Thr
               20
                                   25
33 Val Met Glu Gln Leu Lys Lys Ser Lys Thr Leu Phe Ser Leu Met Gln
35 Tyr Ser Glu Glu Phe Arg Ile His Phe Thr Phe Lys Glu Phe Gln Asn
37 Asn Pro Asn Pro Arg Ser Leu Val Lys Pro Ile Thr Gln Leu Leu Gly
                       70
                                           75
39 Arg Thr His Thr Ala Thr Gly Ile Arg Lys Val Val Arg Glu Leu Phe
                                       90
41 Asn Ile Thr Asn Gly Ala Arg Lys Asn Ala Phe Lys Ile Leu Val Val
               100
                                   105
43 Ile Thr Asp Gly Glu Lys Phe Gly Asp Pro Leu Gly Tyr Glu Asp Val
                               120
45 Ile Pro Glu Ala Asp Arg Glu Gly Val Ile Arg Tyr Val Ile Gly Val
                           135
      130
                                               140
47 Gly Asp Ala Phe Arg Ser Glu Lys Ser Arg Gln Glu Leu Asn Thr Ile
                       150
49 Ala Ser Lys Pro Pro Arg Asp His Val Phe Gln Val Asn Asn Phe Glu
                   165
                                       170
51 Ala Leu Lys Thr Ile Gln Asn Gln Leu Arg Glu Lys Ile Phe Ala
               180
                                   185
54 <210> SEQ ID NO: 2
55 <211> LENGTH: 191
56 <212> TYPE: PRT
57 <213> ORGANISM: Homo sapiens
59 <400> SEQUENCE: 2
60 Cys Pro Arg Gln Glu Gln Asp Ile Val Phe Leu Ile Asp Gly Ser Gly
```

Input Set : A:\00786-804001.TXT

61	1				5					10					15	
		Tle	Ser	Ser	_	Asn	Phe	Ala	Thr		Met.	Asn	Phe	Val	Arg	Ala
63	001		001	20	9				25					30	5	
	Val	Ile	Ser		Phe	Gln	Ara	Pro		Thr	Gln	Phe	Ser		Met	Gln
65			35				5	40					45			
	Phe	Ser	Asn	Lvs	Phe	Gln	Thr	His	Phe	Thr	Phe	Glu	Glu	Phe	Arg	Arq
67		50		-1-			55					60.			5	5
68	Thr		Asn	Pro	Leu	Ser	Leu	Leu	Ala	Ser	Val	His	Gln	Leu	Gln	Gly
	65					70					75					80
70	Phe	Thr	Tyr	Thr	Ala	Thr	Ala	Ile	Gln	Asn	Val	Val	His	Arg	Leu	Phe
71			-		85					90				_	95	
72	His	Ala	Ser	Tyr	Gly	Ala	Arg	Arg	Asp	Ala	Thr	Lys	Ile	Leu	Ile	Val
73				100	_				105					110		
74	Ile	Thr	Asp	Gly	Lys	Lys	Glu	Gly	Asp	Ser	Leu	Asp	Tyr	Lys	Asp	Val
75			115	_				120					125			
76	Ile	Pro	Met	Ala	Asp	Ala	Ala	Gly	Ile	Ile	Arg	Tyr	Ala	Ile	Gly	Val
77		130					135					140				
78	Gly	Leu	Ala	Phe	Gln	Asn	Arg	Asn	Ser	Trp	Lys	Glu	Leu	Asn	Asp	Ile
79	145					150					155					160
80	Ala	Ser	Lys	Pro	Ser	Gln	Glu	His	Ile	Phe	Lys	Val	Glu	Asp	Phe	Asp
81					165					170					175	
82	Ala	Leu	Lys	Asp	Ile	Gln	Asn	Gln	Leu	Lys	Glu	Lys	Ile	Phe	Ala	
83				180					185					190		
85	<210)> SI	EQ II	ON C	3											
				H: 19	1								•			
		2> T)														
				ISM:		sap	iens	5								
				NCE:							_		_		_	
		Pro	His	Gln		Met	Asp	Ile	Val		Leu	Ile	Asp	Gly		Gly '
92	_1		_		5	_	_,	_		10	_			1	15	- 1
	Ser	He	Asp		Asn	Asp	Phe						Uha	V a I	GIn	АТа
94				20				ASI		Met	гÀг	GTA	rne			
	vат		~ 1		_1	~ 7			25		_	_		30		67 .
96		Mec	_		Phe	Glu		Thr	25		_	_	Ala	30	Met	Gln
4/			35	Gln			Gly	Thr 40	25 Asp	Thr	Leu	Phe	Ala 45	30 Leu	Met	
	Tyr	Ser	35	Gln			Gly Ile	Thr 40	25 Asp	Thr	Leu	Phe Thr	Ala 45	30 Leu		
98	_	Ser 50	35 Asn	Gln Leu	Leu	Lys	Gly Ile 55	Thr 40 His	25 Asp Phe	Thr Thr	Leu Phe	Phe Thr 60	Ala 45 Gln	30 Leu Phe	Met Arg	Thr
98 99	Ser	Ser 50	35 Asn	Gln Leu	Leu	Lys Ser	Gly Ile 55	Thr 40 His	25 Asp Phe	Thr Thr	Leu Phe Ile	Phe Thr 60	Ala 45 Gln	30 Leu Phe	Met	Thr Gly
98 99 100	Ser) 65	Ser 50 Pro	35 Asn Ser	Gln Leu Gln	Leu Gln	Lys Ser 70	Gly Ile 55 Leu	Thr 40 His Val	25 Asp Phe Asp	Thr Thr Pro	Leu Phe Ile 75	Phe Thr 60 Val	Ala 45 Gln Gln	30 Leu Phe Leu	Met Arg Lys	Thr Gly 80
98 99 100 101	Ser) 65 L Leu	Ser 50 Pro	35 Asn Ser	Gln Leu Gln	Leu Gln Ala	Lys Ser 70	Gly Ile 55 Leu	Thr 40 His Val	25 Asp Phe Asp	Thr Thr Pro	Leu Phe Ile 75	Phe Thr 60 Val	Ala 45 Gln Gln	30 Leu Phe Leu	Met Arg Lys	Thr Gly
98 99 100 101	Ser) 65 l Leu	Ser 50 Pro	35 Asn Ser	Gln Leu Gln E Thr	Leu Gln Ala 85	Lys Ser 70 Thr	Gly Ile 55 Leu	Thr 40 His Val	25 Asp Phe Asp	Thr Thr Pro Thr 90	Leu Phe Ile 75 Val	Phe Thr 60 Val	Ala 45 Gln Gln	30 Leu Phe Leu	Met Arg Lys Leu 95	Thr Gly 80 Phe
98 99 100 101 102 103	Ser) 65 L Leu } } His	Ser 50 Pro	35 Asn Ser	Gln Leu Gln Thr	Leu Gln Ala 85 Gly	Lys Ser 70 Thr	Gly Ile 55 Leu	Thr 40 His Val	25 Asp Phe Asp Leu	Thr Thr Pro Thr 90	Leu Phe Ile 75 Val	Phe Thr 60 Val	Ala 45 Gln Gln	30 Leu Phe Leu Glr	Met Arg Lys Leu 95	Thr Gly 80
98 99 100 101 102 103	Ser) 65 L Leu) His	Ser 50 Pro Thr	35 Asn Ser Phe	Gln Leu Gln Thr Asn 100	Leu Gln Ala 85 Gly	Lys Ser 70 Thr	Gly Ile 55 Leu Gly	Thr 40 His Val Val	25 Asp Phe Asp Leu Ser 105	Thr Thr Pro Thr 90 Ala	Leu Phe Ile 75 Val	Phe Thr 60 Val Val	Ala 45 Gln Gln Thr	30 Leu Phe Leu Glr	Met Arg Lys Leu 95 Ile	Thr Gly 80 Phe
98 99 100 101 102 103 104	Ser) 65 Leu His	Ser 50 Pro Thr	35 Asn Ser Phe Lys	Gln Leu Gln Thr Asn 100 Gly	Leu Gln Ala 85 Gly	Lys Ser 70 Thr	Gly Ile 55 Leu Gly	Thr 40 His Val Val Lys	25 Asp Phe Asp Leu Ser 105 Asp	Thr Thr Pro Thr 90 Ala	Leu Phe Ile 75 Val	Phe Thr 60 Val Val	Ala 45 Gln Gln Thr	30 Leu Phe Leu Glr Leu 110 Ser	Met Arg Lys Leu 95 Ile	Thr Gly 80 Phe
98 99 100 101 102 103 104 105	Ser) 65 L Leu 2 B His	Ser 50 Pro Thu S His	35 Asn Ser Phe Lys	Gln Leu Gln Thr Asn 100 Gly	Leu Gln Ala 85 Gly	Lys Ser 70 Thr Ala	Gly Ile 55 Leu Gly Arg	Thr 40 His Val Lys Lys	25 Asp Phe Asp Leu Ser 105 Asp	Thr Pro Thr 90 Ala	Leu Phe Ile 75 Val	Phe Thr 60 Val Val	Ala 45 Gln Gln Thr	30 Leu Phe Leu Glr Leu 110	Met Arg Lys Leu 95 Ile	Gly 80 Phe Val
98 99 100 103 103 104 105 106	Ser) 65 Leu) His i Ile	Ser 50 Pro 1 Thr S His	35 Asn Ser Phe Lys Asr 115 O Glr	Gln Leu Gln Thr Asn 100 Gly	Leu Gln Ala 85 Gly	Lys Ser 70 Thr Ala	Gly Ile 55 Leu Gly Arg	Thr 40 His Val Lys Lys 120	25 Asp Phe Asp Leu Ser 105 Asp	Thr Pro Thr 90 Ala	Leu Phe Ile 75 Val	Phe Thr 60 Val Val Lys Glu	Ala 45 Gln Gln Thr Ile Tyr 125	30 Leu Phe Leu Glr Leu 110	Met Arg Lys Leu 95 Ile	Thr Gly 80 Phe
98 99 100 101 102 103 104 105 106 107	Ser) 65 L Leu 2 B His 5 Ile 7 Ile 8	Ser 50 Pro Thr S His E Thr Pro 130	35 Asn Ser Phe Lys Asr 115 O Glr	Gln Leu Gln E Thr Asn 100 Gly Ala	Leu Gln 85 Gly Gln	Lys Ser 70 Thr Ala Lys	Gly Ile 55 Leu Gly Arg Tyr Ala 135	Thr 40 His Val Lys 120 Gly	25 Asp Phe Asp E Leu S Ser 105 S Asp	Thr Pro Thr 90 Ala Pro	Leu Phe Ile 75 Val Lys Leu Arg	Phe Thr 60 Val Val Lys Glu Tyr 140	Ala 45 Gln Gln Thr Ile Tyr 125	John Leu Phe Leu Glr. Leu 110 Ser Ile	Met Arg Lys Leu 95 Ile Asp	Gly 80 Phe Val
98 99 100 101 102 103 104 105 106 107	Ser) 65 L Leu B His Ile J Ile G Gly	Ser 50 Pro Thr S His E Thr 130 His	35 Asn Ser Phe Lys Asr 115 O Glr	Gln Leu Gln E Thr Asn 100 Gly Ala	Leu Gln 85 Gly Gln	Lys Ser 70 Thr Ala Lys Lys	Gly Ile 55 Leu Gly Arg Tyr Ala 135	Thr 40 His Val Lys 120 Gly	25 Asp Phe Asp E Leu S Ser 105 S Asp	Thr Pro Thr 90 Ala Pro	Leu Phe Ile 75 Val Lys Leu Arg	Thr 60 Val Val Lys Glu Tyr 140	Ala 45 Gln Gln Thr Ile Tyr 125	John Leu Phe Leu Glr. Leu 110 Ser Ile	Met Arg Lys Leu 95 Ile Asp	Thr Gly 80 Phe Val Val Val
98 99 100 101 102 103 104 105 106 107	Ser) 65 L Let 2 3 His 5 Ile 6 7 Ile 8 9 Gly	Ser 50 Pro Thr S His E Thr 130 7 His	35 Asn Ser Phe Lys Asr 115 Glr	Gln Leu Gln E Thr S Asm 100 D Gly Thr Ala	Leu Gln 85 Gly Gln Glu Glu	Lys Ser 70 Thr Ala Lys Gly 150	Gly Ile 55 Leu Gly Arg Tyr Ala 135	Thr 40 His Val Lys 120 Gly	25 Asp Phe Asp E Leu S Ser 105 S Asp T Ile	Thr Pro Thr 90 Ala Pro	Leu Phe Tle 75 Val Lys Leu Arg	Thr 60 Val Val Lys Glu Tyr 140	Ala 45 Gln Gln Thr Ile Tyr 125 Ala	Asn	Met Arg Lys Leu 95 Ile Asp Asp	Gly 80 Phe Val

Input Set : A:\00786-804001.TXT

110					165					170					175	
112	7 l n	Leu	C1 11	Cor		Cln	Tarc	Cln	Lon		Clu	Tvc	Tlo	· Trans		
	АІа	Leu	GIY	180	TTE	GIII	пÃ2	GIII	185	GIII	GIU	пуз	TTE	190	на	
114	-21	0 × 01	DO T1						100					190		
		0> SI														
		1> LI	_		84											
		2> T														
		3> 01				o saj	piens	5								
		0> SI														
	-	Ile	Lys	Gly		Val	Asp	Leu	Val		Leu	Phe	Asp	Gly		Met
123	1				5				_	10	_				15	_
	Ser	Leu	Glņ		Asp	G1u	Phe	Gln		Ile	Leu	Asp	Phe		Lys	Asp
125				20					25					30		
	Val	Met		Lys	Leu	Ser	Asn		Ser	Tyr	Gln	Phe		Ala	Val	Gln
127			35					40					45			
128	Phe	Ser	Thr	Ser	Tyr	Lys	Thr	Glu	Phe	Asp	Phe	Ser	Asp	Tyr	Val	Lys
129		50					55					60				
130	${\tt Trp}$	Lys	Asp	Pro	Asp	Ala	Leu	Leu	Lys	His	Val	Lys	His	Met	Leu	Leu
131						70					75					80
132	Leu	Thr	Asn	Thr	Phe	Gly	Ala	Ile	Asn	Tyr	Val	Ala	Thr	Glu	Val	Phe
133					85					90					95	
134	Arg	Glu	Glu	Leu	Gly	Ala	Arg	Pro	Asp	Ala	Thr	Lys	Val	Leu	Ile	Ile
135				100					105					110		
136	Ile	Thr	Asp	Gly	Glu	Ala	Thr	Asp	Ser	Gly	Asn	Ile	Asp	Ala	Ala	Lys
137			115					120					125			
138	Asp	Ile	Ile	Arg	Tyr	Ile	Ile	Gly	Ile	Gly	Lys	His	Phe	Gln	Thr	Lys
139		130					135					140				
140	Glu	Ser	Gln	Glu	Thr	Leu	His	Lys	Phe	Ala	Ser	Lys	Pro	Ala	Ser	Glu
141	145					150					155					160
142	Phe	Val	Lys	Ile	Leu	Asp	Thr	Phe	Glu	Lys	Leu	Lys	Asp	Leu	Phe	Thr
143					165					170					175	
144	Glu	Leu	Gln	Lys	Lys	Ile	Tyr	Val								
145				180	_		_									
147	<210)> SI	EQ II	ON C	: 5											
148	<213	1> LI	ENGT	H: 19	95											
149	<212	2> TY	PE:	PRT												
150	<213	3> OI	RGAN	ISM:	Homo	sap	oiens	3								
)> SI				-										
		Ser				Asp	Ile	Val	Ile	Val	Leu	Asp	Gly	Ser	Asn	Ser
154	î				5	-				10		•	-		15	
		Tyr	Pro	Trp	Asp	Ser	Val	Thr	Ala		Leu	Asn	Asp	Leu		Lys
156		_		20	•				25				-	30		-
	Ara	Met	Asp		Glv	Pro	Lvs	Gln		Gln	Val	Glv	Ile		Gln	Tyr
158	9		35		1		-1-	40				1	45			- 4 -
	Glv	Glu		Val	Thr	His	G]u		Asn	Leu	Asn	Lvs		Ser	Ser	Thr
160	1	50					55					60	-1-			
	Glu	Glu	Va 1	Len	Va 1	Ala		Lvs	Lvs	Ile	Va 1		Ara	Glv	Glv	Ara
162			,	204	,	70		~10	-10		75		9	1	1	80
		Thr	Met	Thr	Ala		Glv	Thr	Asp	Thr		Ara	Lvs	G111	Ala	
164					85		1			90		3	-10		95	
-01					55											

Input Set : A:\00786-804001.TXT

```
165 Thr Glu Ala Arg Gly Ala Arg Arg Gly Val Lys Lys Val Met Val Ile
                                    105
                100
167 Val Thr Asp Gly Glu Ser His Asp Asn His Arg Leu Lys Lys Val Ile
                               120
169 Gln Asp Cys Glu Asp Glu Asn Ile Gln Arg Phe Ser Ile Ala Ile Leu
                            135
171 Gly Ser Tyr Asn Arg Gly Asn Leu Ser Thr Glu Lys Phe Val Glu Glu
                       150
                                            155
173 Ile Lys Ser Ile Ala Ser Glu Pro Thr Glu Lys His Phe Phe Asn Val
                   165
                                        170
175 Ser Asp Glu Leu Ala Leu Val Thr Ile Val Lys Thr Leu Gly Glu Arg
176
                180
                                    185
177 Ile Phe Ala
178
            195
180 <210> SEQ ID NO: 6
181 <211> LENGTH: 195
182 <212> TYPE: PRT
183 <213> ORGANISM: Homo sapiens
185 <400> SEQUENCE: 6
186 Cys Pro Ser Leu Ile Asp Val Val Val Cys Asp Glu Ser Asn Ser
188 Ile Tyr Pro Trp Asp Ala Val Lys Asn Phe Leu Glu Lys Phe Val Gln
               20
                                    25
190 Gly Leu Asp Ile Gly Pro Thr Lys Thr Gln Val Gly Leu Ile Gln Tyr
                                40
192 Ala Asn Asn Pro Arg Val Val Phe Asn Leu Asn Thr Tyr Lys Thr Lys
194 Glu Glu Met Ile Val Ala Thr Ser Gln Thr Ser Gln Tyr Gly Gly Asp
195 65
                        70
                                            75
196 Leu Thr Asn Thr Phe Gly Ala Ile Gln Tyr Ala Arg Lys Tyr Ala Tyr
                                        90
198 Ser Ala Ala Ser Gly Gly Arg Arg Ser Ala Thr Lys Val Met Val Val
               100
                                    105
200 Val Thr Asp Gly Glu Ser His Asp Gly Ser Met Leu Lys Ala Val Ile
           115
                               120
202 Asp Gln Cys Asn His Asp Asn Ile Leu Arg Phe Gly Ile Ala Val Leu
       130
                           135
                                                140
204 Gly Tyr Leu Asn Arg Asn Ala Leu Asp Thr Lys Asn Leu Ile Lys Glu
                        150
                                            155
206 Ile Lys Ala Ile Ala Ser Ile Pro Thr Glu Arg Tyr Phe Phe Asn Val
                    165
                                        170
208 Ser Asp Glu Ala Ala Leu Leu Glu Lys Ala Gly Thr Leu Gly Glu Gln
209
               180
                                    185
210 Ile Phe Ser
211
           195
213 <210> SEQ ID NO: 7
214 <211> LENGTH: 195
215 <212> TYPE: PRT
216 <213> ORGANISM: Homo sapiens
```

Input Set : A:\00786-804001.TXT

218	<400)> SI	EOUE	NCE:	7											
						Asp	Val	Val	Ile	Val	Leu	Asp	Gly	Ser	Asn	Ser
220	1			4	5	- 1				10		- 1			15	
	Ile	Tvr	Pro	Trp	Ser	Glu	Val	Gln	Thr	Phe	Leu	Arq	Arq	Leu	Val	Gly
222				20					25			-	,	30		1
	Lvs	Leu	Phe	Ile	Asp	Pro	Glu	Gln	Ile	Gln	Val	Glv	Leu	Val	Gln	Tvr
224	-1-		35		E			40				1	45			-1-
	Glv	Glu	Ser	Pro	Val.	His	Glu	Tro	Ser	Leu	Glv	Asp	Phe	Ara	Thr	Lvs
226	1	50					55				1	60				-1-
227	Glu	Glu	Val	Val	Arq	Ala	Ala	Lvs	Asn	Leu	Ser	Arq	Arq	Glu	Gly	Arg
228					,	70		-			75	,	_			80
229	Glu	Thr	Lvs	Thr	Ala	Gln	Ala	Ile	Met	Val	Ala	Cvs	Thr	Glu	Gly	Phe
230					85					90		4			95	
	Ser	Gln	Ser	His	Glv	Glv	Arq	Pro	Glu	Ala	Ala	Arq	Leu	Leu	Val	Val
232				100	4	1	3		105			5		110		
	Val	Thr	Asp	Glv	Glu	Ser	His	Asp		Glu	Glu	Leu	Pro		Ala	Leu
234			115	-				120	-				125			
	Lys	Ala	Cys	Glu	Ala	Gly	Arg	Val	Thr	Arq	Tyr	Gly	Ile	Ala	Val	Leu
236	•	130	_			- 4	135			,	•	140				
	Gly	His	Tyr	Leu	Arq	Arq	Gln	Arq	Asp	Pro	Ser	Ser	Phe	Leu	Arg	Glu
	145		-		,	150		,	•		155				,	160
239	Ile	Arq	Thr	Ile	Ala	Ser	Asp	Pro	Asp	Glu	Arq	Phe	Phe	Phe	Asn	Val
240		_			165		-		-	170	•				175	
241	Thr	Asp	Glu	Ala	Ala	Leu	Thr	Asp	Ile	Val	Asp	Ala	Leu	Gly	Asp	Arq
242		-		180				-	185		-			190	-	_
243	Ile	Phe	Gly													
243 244	Ile	Phe	Gly 195									•				
244			195	O NO:	: 8							•				
244 246	<210)> SI	195 EQ II) NO:								•				
244 246 247	<210 <211)> SI L> LI	195 EQ II	4: 19								•				
244 246 247 248	<210 <211 <212)> SI l> LI 2> TY	195 EQ II ENGTI (PE:	H: 19 PRT		o sap	piens	3				•				
244 246 247 248 249	<210 <211 <212 <213)> SI l> LI 2> TY 3> OI	195 EQ II ENGTI (PE: RGAN)	H: 19 PRT	3 Homo	sag	piens	3				•				
244 246 247 248 249 251	<210 <211 <212 <213 <400)> SI l> LI 2> TY 3> OI)> SI	195 EQ II ENGTH (PE: RGAN) EQUEN	H: 19 PRT [SM: NCE:	Homo 8				Ile	Val	Leu	Asp	Gly	Ser	Asn	Ser
244 246 247 248 249 251	<210 <211 <212 <213 <400)> SI l> LI 2> TY 3> OI)> SI	195 EQ II ENGTH (PE: RGAN) EQUEN	H: 19 PRT [SM: NCE:	Homo 8				Ile	Val	Leu	Asp	Gly		Asn 15	Ser
244 246 247 248 249 251 252 253	<210 <211 <212 <213 <400 Cys)> SI l> LI 2> TY 3> OI)> SI Gln	195 EQ II ENGTH (PE: RGAN) EQUEN	H: 19 PRT SM: CE: Tyr	Homo 8 Met 5	Asp	Ile	Val		10		_	_			
244 246 247 248 249 251 252 253	<210 <211 <212 <213 <400 Cys)> SI l> LI 2> TY 3> OI)> SI Gln	195 EQ II ENGTH (PE: RGAN) EQUEN	H: 19 PRT SM: CE: Tyr	Homo 8 Met 5	Asp	Ile	Val		10		_	_		15	
244 246 247 248 249 251 252 253 254 255	<210 <211 <212 <213 <400 Cys 1 Ile)> SI l> LI l> TY 2> TY 3> OI 3> SI Gln	195 EQ II ENGTH YPE: RGANI EQUEN Thr	H: 19 PRT ISM: NCE: Tyr Trp 20	Homo 8 Met 5 Val	Asp Glu	Ile Val	Val Gln	His 25	10 Phe	Leu	Ile	Asn	Ile 30	15	Lys
244 246 247 248 249 251 252 253 254 255 256 257	<210 <211 <213 <400 Cys 1 Ile)> SI l> LI 2> TY 3> OF Gln Tyr	195 EQ II ENGTH YPE: RGANI EQUEN Thr Pro Tyr 35	H: 19 PRT ISM: ICE: Tyr Trp 20 Ile	Homo 8 Met 5 Val	Asp Glu Pro	Ile Val Gly	Val Gln Gln 40	His 25 Ile	10 Phe Gln	Leu Val	Ile Gly	Asn Val 45	Ile 30 Val	15 Leu Gln	Lys Tyr
244 246 247 248 249 251 252 253 254 255 256 257 258	<210 <211 <212 <213 <400 Cys 1 Ile Lys)> SI l> LI 2> TY 3> OF Gln Tyr Phe Glu	195 EQ II ENGTH (PE: RGAN) EQUEN Thr Pro Tyr 35 Asp	H: 19 PRT ISM: ICE: Tyr Trp 20 Ile	Homo 8 Met 5 Val Gly	Asp Glu Pro	Ile Val Gly Glu	Val Gln Gln 40 Phe	His 25 Ile His	10 Phe Gln Leu	Leu Val Asn	Ile Gly Asp	Asn Val 45 Tyr	Ile 30 Val	15 Leu	Lys Tyr
244 246 247 248 249 251 252 253 254 255 256 257 258 259	<210 <211 <212 <213 <400 Cys 1 Ile Lys	O> SI L> LH 2> TY B> OF Gln Tyr Phe Glu 50	195 EQ II ENGTH (PE: RGAN) EQUEN Thr Pro Tyr 35 Asp	PRT ISM: ICE: Tyr Trp 20 Ile	Homo 8 Met 5 Val Gly	Asp Glu Pro	Ile Val Gly Glu 55	Val Gln Gln 40 Phe	His 25 Ile His	10 Phe Gln Leu	Leu Val Asn	Ile Gly Asp	Asn Val 45 Tyr	Ile 30 Val	15 Leu Gln Ser	Lys Tyr Val
244 246 247 248 249 251 252 253 254 255 256 257 258 259 260	<210 <211 <211 <213 <400 Cys 1 Ile Lys Gly	O> SI L> LH 2> TY B> OF Gln Tyr Phe Glu 50	195 EQ II ENGTH (PE: RGAN) EQUEN Thr Pro Tyr 35 Asp	PRT ISM: ICE: Tyr Trp 20 Ile	Homo 8 Met 5 Val Gly	Asp Glu Pro	Ile Val Gly Glu 55	Val Gln Gln 40 Phe	His 25 Ile His	10 Phe Gln Leu	Leu Val Asn	Ile Gly Asp	Asn Val 45 Tyr	Ile 30 Val	15 Leu Gln	Lys Tyr Val
244 246 247 248 249 251 252 253 254 255 256 257 258 259 260 261	<210 <211 <211 <213 <400 Cys 1 Ile Lys Gly Lys 65	O> SI L> LH 2> TY B> OH O> SI Gln Tyr Phe Glu 50 Asp	195 EQ II ENGTH (PE: RGANI EQUEN Thr Pro Tyr 35 Asp	PRT PRT ISM: ICE: Tyr Trp 20 Ile Val	Homo 8 Met 5 Val Gly Val	Asp Glu Pro His Ala 70	Ile Val Gly Glu 55 Ala	Val Gln Gln 40 Phe Ser	His 25 Ile His	10 Phe Gln Leu Ile	Leu Val Asn Glu 75	Ile Gly Asp 60 Gln	Asn Val 45 Tyr Arg	Ile 30 Val Arg Gly	15 Leu Gln Ser	Lys Tyr Val Thr
244 246 247 248 249 251 252 253 254 255 256 257 258 260 261 262	<210 <211 <211 <213 <400 Cys 1 Ile Lys Gly Lys 65	O> SI L> LH 2> TY B> OH O> SI Gln Tyr Phe Glu 50 Asp	195 EQ II ENGTH (PE: RGANI EQUEN Thr Pro Tyr 35 Asp	PRT PRT ISM: ICE: Tyr Trp 20 Ile Val	Homo 8 Met 5 Val Gly Val Glu	Asp Glu Pro His Ala 70	Ile Val Gly Glu 55 Ala	Val Gln Gln 40 Phe Ser	His 25 Ile His	10 Phe Gln Leu Ile	Leu Val Asn Glu 75	Ile Gly Asp 60 Gln	Asn Val 45 Tyr Arg	Ile 30 Val Arg Gly	15 Leu Gln Ser	Lys Tyr Val Thr
244 246 247 248 249 251 252 253 254 255 256 257 258 260 261 262 263	<210 <211 <212 <400 Cys 1 Ile Lys Gly Lys 65 Glu)> SI l> LH 2> TY 3> OF Gln Tyr Phe Glu 50 Asp	195 EQ II ENGTH YPE: RGANI EQUEN Thr Pro Tyr 35 Asp Val	PRT PRT SM: UCE: Tyr Trp 20 Ile Val Val Thr	Homo 8 Met 5 Val Gly Val Glu Ala 85	Asp Glu Pro His Ala 70 Phe	Ile Val Gly Glu 55 Ala Gly	Val Gln Gln 40 Phe Ser Ile	His 25 Ile His His	10 Phe Gln Leu Ile Phe 90	Leu Val Asn Glu 75 Ala	Ile Gly Asp 60 Gln Arg	Asn Val 45 Tyr Arg Ser	Ile 30 Val Arg Gly Glu	15 Leu Gln Ser Gly Ala 95	Lys Tyr Val Thr 80 Phe
244 246 247 248 249 251 252 253 254 255 256 257 258 259 260 261 262 263 264	<210 <211 <212 <400 Cys 1 Ile Lys Gly Lys 65 Glu)> SI l> LH 2> TY 3> OF Gln Tyr Phe Glu 50 Asp	195 EQ II ENGTH YPE: RGANI EQUEN Thr Pro Tyr 35 Asp Val	PRT PRT ISM: ICE: Tyr Trp 20 Ile Val Val Thr Gly	Homo 8 Met 5 Val Gly Val Glu Ala 85	Asp Glu Pro His Ala 70 Phe	Ile Val Gly Glu 55 Ala Gly	Val Gln Gln 40 Phe Ser Ile	His 25 Ile His Glu Lys	10 Phe Gln Leu Ile Phe 90	Leu Val Asn Glu 75 Ala	Ile Gly Asp 60 Gln Arg	Asn Val 45 Tyr Arg Ser	Ile 30 Val Arg Gly Glu Val	15 Leu Gln Ser Gly Ala	Lys Tyr Val Thr 80 Phe
244 246 247 248 249 251 252 253 254 255 256 257 258 260 261 262 263 264 265	<210 <211 <211 <213 <400 Cys 1 Ile Lys Gly Lys 65 Glu)> SI L> LH 2> TY 3> OF Cln Tyr Phe Glu 50 Asp Thr	195 EQ II ENGTH (PE: RGANI) EQUEN Thr Pro Tyr 35 Asp Val Arg Gly	PRT PRT ISM: ICE: Tyr Trp 20 Ile Val Val Thr Gly 100	Homo 8 Met 5 Val Gly Val Glu Ala 85 Arg	Asp Glu Pro His Ala 70 Phe	Ile Val Gly Glu 55 Ala Gly Gly	Val Gln Gln 40 Phe Ser Ile Ala	His 25 Ile His Glu Lys 105	10 Phe Gln Leu Ile Phe 90 Lys	Leu Val Asn Glu 75 Ala Val	Ile Gly Asp 60 Gln Arg	Asn Val 45 Tyr Arg Ser Ile	Ile 30 Val Arg Gly Glu Val 110	15 Leu Gln Ser Gly Ala 95 Ile	Lys Tyr Val Thr 80 Phe
244 246 247 248 249 251 252 253 254 255 256 257 260 261 262 263 264 265 266	<210 <211 <211 <213 <400 Cys 1 Ile Lys Gly Lys 65 Glu)> SI L> LH 2> TY 3> OF Cln Tyr Phe Glu 50 Asp Thr	195 EQ II ENGTH (PE: RGANI) EQUEN Thr Pro Tyr 35 Asp Val Arg Gly	PRT PRT ISM: ICE: Tyr Trp 20 Ile Val Val Thr Gly 100	Homo 8 Met 5 Val Gly Val Glu Ala 85 Arg	Asp Glu Pro His Ala 70 Phe	Ile Val Gly Glu 55 Ala Gly Gly	Val Gln Gln 40 Phe Ser Ile Ala Pro	His 25 Ile His Glu Lys 105	10 Phe Gln Leu Ile Phe 90 Lys	Leu Val Asn Glu 75 Ala Val	Ile Gly Asp 60 Gln Arg	Asn Val 45 Tyr Arg Ser Ile Val	Ile 30 Val Arg Gly Glu Val 110	15 Leu Gln Ser Gly Ala 95	Lys Tyr Val Thr 80 Phe
244 246 247 248 251 252 253 254 255 256 257 260 261 262 263 264 265 266 267	<210 <211 <211 <212 <400 Cys 1 Ile Lys Gly Lys 65 Glu Gln Asp	O> SI L> LI 2> TY B> OI O> SI Gln Tyr Phe Glu 50 Asp Thr Lys Gly	195 EQ II ENGTH (PE: RGANI) EQUEN Thr Pro Tyr 35 Asp Val Arg Gly Glu 115	PRT PRT ISM: ICE: Tyr Trp 20 Ile Val Val Thr Gly 100 Ser	Homo 8 Met 5 Val Gly Val Glu Ala 85 Arg	Asp Glu Pro His Ala 70 Phe Lys Asp	Ile Val Gly Glu 55 Ala Gly Gly Ser	Val Gln Gln 40 Phe Ser Ile Ala Pro 120	His 25 Ile His Glu Lys 105 Asp	10 Phe Gln Leu Ile Phe 90 Lys	Leu Val Asn Glu 75 Ala Val Glu	Ile Gly Asp 60 Gln Arg Met Lys	Asn Val 45 Tyr Arg Ser Ile Val 125	Ile 30 Val Arg Gly Glu Val 110 Ile	15 Leu Gln Ser Gly Ala 95 Ile	Lys Tyr Val Thr 80 Phe Thr

VERIFICATION SUMMARY

DATE: 08/28/2001

PATENT APPLICATION: US/09/758,493

TIME: 10:02:13

Input Set : A:\00786-804001.TXT